
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Barry Allen Fisher et al.	Attorney Docket No.: IDTXP044
Application No.: 09/698,624	Examiner: Sathyanaraya V. Perungavoor
Filed: October 27, 2000	Group: 2624
Title: PORTABLE APPARATUS FOR IDENTIFICATION VERIFICATION	

DECLARATION OF ANTHONY MISSLIN

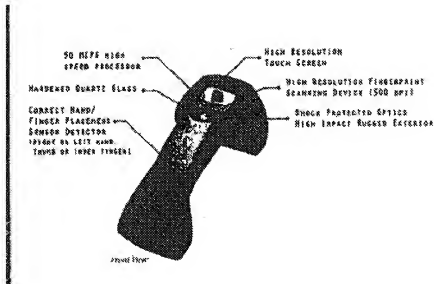
I, Anthony Misslin declare the following:

1. I am currently the Product Manager for Mobile Identification at L1 Identity Solutions, Inc., Biometrics Division, formerly Identix Incorporated, owner of the above-identified patent application. I am a co-inventor on the above-identified patent application.
2. I have worked in the field of mobile identification since 1997, during which time I have evaluated numerous mobile identification devices. As engineering director for L-1 (then Digital Biometrics), I tested and evaluated fingerprint scanners used by the FBI as part of the National Crime Information Center 2000 (NCIC 2000) mobile identification project, the first such project for mobile identification. I also acted as lead engineer and program manager on the National Institute of Justice Wireless Demonstration Project that deployed the first production mobile identification systems using cellular carriers to connect squad cars to centralized databases in Ontario, CA. Since 2001, we have delivered three generations of L-1 mobile devices and implemented or evaluated solutions using third party devices manufactured by GreenBit, Labcal, Datastrip, Motorola, and Pradonet. As product manager for our mobile identification products I led the integration of our systems to provide mobile identification solutions for the Western Identification Network (WIN), California Department of Justice (CAL-DOJ), US VISIT IDENT system, and the FBI's Repository of Individual's of Special Concern (RISC). I am now supporting mobile identification solutions for the US Department of Defense.

3. Our patent application describes a portable apparatus for identification and verification of a fingerprint. In one configuration, the apparatus includes a housing having a handle portion and a user interface at an end of the handle portion, as well as a finger-receiving surface where a subject places his finger. The finger-receiving surface receives images of a fingerprint of the subject while the apparatus is being handheld by an operator. The operator can hold the handle portion and operate the apparatus via the user interface using a single hand during fingerprint capture of the subject.

4. I have reviewed the Office Action dated August 13, 2009. I understand that our claims are currently rejected over Diehl, U.S. Patent No. 6,317,544 (“Diehl”) and the Single Fingerprint Station 2000 (SFS 2000TM) disclosed by Printrak. I have reviewed Diehl, the SFS 2000TM Brochure (Attached as Appendix A) and the SFS 2000TM Press Release (Attached as Appendix B). In particular, I understand the Examiner asserts that the SFS 2000TM has a “handle portion and user interface portion...configured to allow the handle portion to be held by a single hand of an operator and the apparatus operated via the user interface using the same hand during image capture of the fingerprint.” (Office Action, page 8)

5. The SFS 2000TM Brochure (Appendix A) describes the SFS 2000TM as “a compact, field-ready solution in a ruggedized ergonomic package” having an “ergonomic design with sensors to ensure correct image capture.” The first page of the brochure includes a labeled diagram of a front view of the SFS 2000TM:



The front view shows an upside down U-shaped apparatus having a long central portion, referred to in the Office Action as a stem. On either side of the long central portion, there is a member that extends downward. These members each appear to have flat surface for resting on a table or other surface. The long central portion is labeled “Correct Hand/Finger Placement Sensor Detector [Right or Left Hand. Thumb or Index Finger.]” At one end of the long central portion, an area labeled “Hardened Quartz Glass” is indicated. This area is also labeled “High Resolution Fingerprint Scanning Device (500 DPI)” and “Shock Protected Optics. High Impact Rugged Exterior.” Page 2 of the brochure states that “Sensors on the side of the SFS 2000™ detect whether the correct hand and finger are being used, and the design also helps ensure correct finger placement.” The front view also shows a touchscreen above the hardened quartz glass. Page 2 describes of the brochure describes this as “Touchscreen interface with flexible GUI-based screen design” and states that “The SFS 2000’s™ touchscreen interface allows operators to enter specific data through interactive Graphical User Interfaces (GUIs).” Page 2 also states that the GUI provides “[r]eal time on-screen quality feedback and cues for the user [e.g., “Press harder/softer” or “Move finger up/down.”].”

6. The SFS 2000™ press release (Appendix B) describes the SFS 2000™ as a “new portable automated fingerprint identification solution” in a “compact, hand-held device.” The press release states that the “SFS 2000™ features an ergonomic design with sensors to distinguish left hand from right hand and thumb from index finger.” The device is described as weighing less than 2.5 pounds at approximately 13 inches x 7.25 inches x 4.75 inches in size.

7. The SFS 2000TM Brochure and Press Release show that the SFS 2000TM is designed such that the subject places an index finger or thumb of one hand along the long central portion of the SFS 2000TM during fingerprint capture with the tip of that finger positioned over the hardened quartz glass area. Once in position, the remaining fingers of the hand ergonomically wrap around the long central portion in such a manner that the sensor detector along the sides detects if the index finger or thumb is being scanned, and what hand it is on. If a thumb is being scanned, the remaining four fingers would wrap under the long central portion, with the palm of the suspect against the side of the central portion; if an index finger is scanned, the thumb falls on one side of the long central portion with the middle, ring and little fingers on the opposite side. I see no other manner of using the SFS 2000TM in which the sensors on the side of the SFS 2000TM could detect whether the correct hand and finger are being used.

8. I see no manner in which the device could be held by an operator during fingerprint capture. Rather, the SFS 2000TM appears to be intended to be placed on a flat surface such that a subject can place his hand on the top surface of the device with the subject's finger positioned on the imaging surface of the device. As described in Paragraph 7 of my declaration, the subject wraps his fingers and palm around the long central portion during fingerprint capture. The flat ends of the upside down U-shaped apparatus are configured for resting the device stably on a flat surface. If an operator were to grasp the long central portion during fingerprint capture, the subject's finger could not be correctly positioned over the quartz image capture surface. In addition, the device would inaccurately detect the operator's finger placement, rather than the subject's.

9. The brochure also indicates that the operator enters data through the GUI before or after fingerprint capture, but not during fingerprint capture. As described above, the GUI provides real time on-screen quality feedback and cues for the user, indicating that the screen is oriented at the subject during capture, providing feedback to ensure correct finger placement.

10. I understand that the Examiner's position is described in the Office Action as follows:

"Examiner contends that (1) SFS2000 is a portable handheld device because [the SFS 2000TM Press Release] at page 1, lines 1-2 describes SFS2000 as a portable handheld device. And (2) SFS2000 does provide a handle portion to be held by a single hand of an operator because the long stem is clearly a handle. Also, the apparatus can be operated by the user interface (i.e. GUI) using the same hand

during image capture of the fingerprint. See [SFS 2000TM Brochure] at page 2, paras. 2-3." (Office Action, page 2)

I have considered each of these citations in the context of the documents as a whole, and believe the Examiner's interpretation is incorrect. With regard to the SFS 2000TM as a portable handheld device, the description of the SFS2000 as a "portable" appears to refer to its small dimensions and relatively low weight, which allow it to be carried. "Handheld" appears to refer to holding the SFS 2000TM in a hand while not in use or to the subject "holding" the stem during capture. With regard to the long stem or central portion being a "handle," while the stem is configured for the subject's hand to be positioned on and around it during fingerprint capture, the stem cannot be held by the operator during fingerprint capture. Finally, as described above in Paragraph 9 of my declaration, the touchscreen appears to be configured for operator use only when the subject's fingerprint is not being captured.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both (under Section 1001 of Title 18 of the United States Code), and that such willful false statements may jeopardize the validity of the application or any registration resulting therefrom.

Date: 23 January 2011

Anthony Misslin
Anthony Misslin

APPENDIX A

SPS 2000



is a wide range of identification applications:

- ▲ Welfare Enrollment
- ▲ National Identification
- ▲ Voter Registration
- ▲ Immigration Control
- ▲ Driver's License Issuance
- ▲ Passport Issuance

captures high quality image capture:

- ▲ Ergonomic design with sensor to ensure correct finger capture
- ▲ Real-time quality feedback
- ▲ Real-time display of scanned finger
- ▲ Prompts for image capturing and immediate capture
- ▲ Self-Calibrating



**PINTRAK
ID SOLUTIONS**
A Division of Pentaco International Inc.

PRODUCT DESCRIPTION

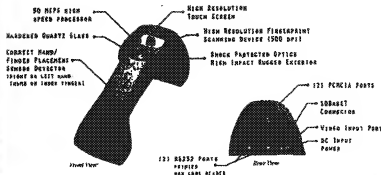
Pintrak's Single Finger Station (SPS) 2000™ provides the world's highest quality single-image capture capability for positive individual identification. Its design allows direct transfer of scanned images to electronic format without intermediate interpretation methods that degrade image quality. The SPS 2000™ is designed for highly accurate image capture to support searching against databases of millions of fingerprint records or one-to-one fingerprint matching. This is the first unit designed to capture images of sufficient quality and fidelity to ensure high accuracy searches against large databases.

HARDWARE

The SPS 2000™ is a compact, field-ready solution in a ruggedized ergonomic package designed specifically for fingerprint-based positive identification applications. Components include an on-board 50-MIPS computer processor, touch-screen interface, high-resolution scanning device, and Pintrak's specialized image processing software.

The scanning device incorporates high quality optics that provide digital images directly to the host (eliminates RS-170 image transfer methods, which lower dynamic range, cause loss of signal, add noise to the fingerprint image, and increase equipment costs). SPS 2000™ captures all fingerprint images in 256 shades of gray with 500 dots per inch resolution, meeting FBI standards for fingerprint image data quality. Images may be sent directly to a host processor via real-time network transmission. The same direct digital image transfer is available when a video camera, bar code reader, or other devices are connected through the SPS 2000's two RS232 ports.

The unit can use a car's cigarette lighter as a power source (subsequent versions will include a rechargeable on-board battery for up to 8 hours continuous operation).



SOFTWARE

Printrak's SFS 2000[™] offers a wide range of functionality specifically designed for real-time personal identification applications. Its design supports a variety of implementations:

▲ Flexible architecture:

- Windows NT (4.0) and UNIX compatible, communicating via TCP/IP
- Image/minute transfer for 1:many searching against fingerprint databases
- Card swipe capability for 1:1 identity verification
- Touchscreen Interface with flexible GUI-based screen design

Sensors on the side of the SFS 2000[™] detect whether the correct hand and finger are being used, and the design also helps ensure correct finger placement. Real-time on-screen quality feedback and cues for the user (e.g., "Press harder/softer" or "Move finger up/down") optimize image quality and help prevent the most common error of single-finger systems: capture of the wrong finger. Both of these benefits ensure the highest possible data quality at the point of entry, which in turn supports highly accurate results for searches and identity confirmations.

The SFS 2000[™]'s touchscreen Interface allows operators to enter specific data through interactive Graphical User Interfaces (GUIs). Standard data input packages are available (e.g., entry of country of origin, sex, and date of birth), or Printrak can custom-design Interfaces based on specific customer requirements.

TYPICAL SPECIFICATIONS

ENVIRONMENTAL

Heat Output	60° F, 16° C Maximum
Operating Temperature	32-158° F, 0-70° C
Operating Humidity	0-90% Relative Humidity

ELECTRICAL

Input Power	110-220 VAC 50-60 Hz or +12V DC
Power Draw	20 Watts Maximum

PHYSICAL

Weight	2.5 lbs., 1045 Grams
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DIMENSIONS

0.8" x 0.9" Imaging Area
Physical Dimensions (inches/cm)
(l x w x h) 13" x 7.25" x 4.75"
(l x w x h) 33cm x 18.5cm x 12cm

Highlights of SFS 2000's...

Software design includes:

Portable and easily reworked

➤ Versatile and reliable interface

➤ Flexible, wireless network

➤ Standard interfaces

➤ Ethernet Interface 10/100/155

➤ PCMCIA Card

➤ Includes two RS232 ports

➤ Two photo cameras for color reader

➤ Includes two PCMCIA

➤ ports and one video input port

➤ Internally ready

➤ Screen technology:

➤ 10 year history of successful

➤ image processing and

➤ matching technology

➤ FBI compatible WFO com-

➤ pression for fingerprint image

➤ (500 dpi, 256 gray scale)

➤ JPEG compression for

➤ color photo images

➤ (256 color for color)

➤ (256 gray scale)

➤ (256 gray scale)

➤ Speed and ease of operation

➤ Polycrystalline ceramic with

➤ dust protection, hardened

➤ glass for optical sensor

➤ 50 MIPS processor controls

➤ CCD camera and lighting

➤ output

➤ Full image processing feature

➤ extraction, quality feedback

➤ and match in less than 5

➤ seconds



**PRINTRAK
ID SOLUTIONS**

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Features, functions and appearance of the product may differ slightly from the above details due to continuing product development
after effectiveness subject to change without notice

APPENDIX B

PRESS RELEASE

FOR FURTHER INFORMATION:

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714/453-8080

PRINTRAK INTERNATIONAL ANNOUNCES NEW PORTABLE FINGERPRINT ID SOLUTION

Hand-Held Single Finger Station Features High-Quality Scanning and Networking Capabilities for Large-Scale Database Searches

ANAHEIM, Calif., December 10, 1996 — A new portable automated fingerprint identification solution featuring real-time matching capabilities is being introduced today by Printrak International (NASDAQ: AFIS). The Single Finger Station 2000 (SFS 2000) features high-speed computer processing power and high-quality image scanning and processing in a compact, hand-held device.

The SFS 2000 leverages the emerging trends in portable computing, functioning as a specialized personal digital assistant (PDA) designed for fingerprint capture and identification. Like most PDAs, the SFS 2000 has a high resolution display, a touch screen and can be powered by battery.

Targeted to civil and commercial markets, the SFS 2000 provides a convenient, cost-effective solution for fingerprint applications ranging from social services to banking.

Leading-Edge Matching Technology

The SFS 2000 provides one-to-one fingerprint matching, which allows the confirmation of a person's identity against an ID card or record maintained in a central file. In a welfare or other disbursement application, one-to-one verification usually occurs when benefits are distributed. Other applications suitable for one-to-one verifications include national ID, voter registration, immigration control, drivers license issuance and passport issuance.

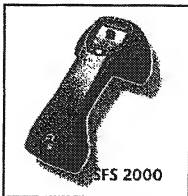
In addition to providing standalone one-to-one fingerprint matching for ID verification, the SFS 2000 is the first identification product of its kind designed to capture and transfer scanned images to electronic format without image quality degradation, ensuring high accuracy searches against large databases.

"No other product on the market today can offer this combination of features. The unprecedented combination of high-quality scanning capabilities and Printrak's industry-leading image processing software technology give the SFS 2000 the ability to perform one-to-one matching locally and sufficient image quality for one-to-many searches," said Richard Giles, Printrak president and CEO.

"One-to-many searching enables the identification of an individual from millions of records. This technology is key to preventing 'double-dipping' in a welfare benefit distribution scheme, for example. It can also prevent the issuance of multiple passports or driver's licenses to the same person," said Giles.

Extensive Features Not Previously Available in Compact Unit The SFS 2000 extensive feature set includes an on-board 50-MIPS computer processor, touch screen interface, high resolution scanning device and Printrak's specialized image processing software. Weighing less than 2.5 pounds, the SFS 2000 is approximately 13 inches x 7.25 inches x 4.75 inches in size.

To enable high quality image capture, the SFS 2000 features an ergonomic design with sensors to distinguish left hand from right hand and thumb from index finger. Key features also include real-time quality control, real-time display of scanned prints, prompts for image centering and recapture, and self-calibration. The SFS 2000 incorporates high-quality optics that provide digital



images directly to the host computer and captures all fingerprint images in 256 shades of gray with 500 dpi resolution, meeting FBI standards for fingerprint image data quality.

Images may be sent directly to a host computer via real-time network transmission. The SFS 2000 is Internet ready and easily networked by modem, cellular telephone or wireless connections. It supports Ethernet, 10Base-T, RS-232 and PCMCIA interfaces. The same direct digital image transfer is available for video cameras, bar code readers or other devices which may be connected to the dual RS-232 ports.

For mobile applications, the SFS 2000 may be powered by a car cigarette lighter. Future product plans call for a rechargeable on-board battery for up to 8 hours of continuous operation.

Pricing and Availability

List pricing for the SFS 2000 begins at \$1,995.00. Printrak is making the SFS 2000 available directly to end-user customers as well as to system integrators who incorporate Printrak hardware and software products into fully integrated systems. Volume shipments of the SFS 2000 will be available in mid-1997.

Company Information

Printrak International Inc. (<http://www.printrakinternational.com>) is a leading worldwide supplier and technology innovator of large-scale automated fingerprint identification systems (AFIS), used in law enforcement and civil applications. Printrak serves more than 150 national, state, county and municipal agencies in 20 countries.

The SFS 2000 is the first product to be introduced by Printrak's new ID Solutions (IDS) division. The new IDS division, formally announced today by Printrak, will provide leading edge identification solutions incorporating a full range of biometric technology ranging from fingerprint identification to voice recognition. The new division will leverage the company's 20-year track record of success in providing leading-edge automated fingerprint identification system solutions to national, regional and local government agencies around the globe.



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